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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,926	02/22/2002	Lin Zhi	015110.0096.UTL1	7786

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EXAMINER

HUANG, EVELYN MEI

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 06/16/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/080,926

Applicant(s)

ZHI ET AL.

Examiner

Evelyn Huang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-97 is/are pending in the application.
- 4a) Of the above claim(s) 12,13,52 and 64-97 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11,14-39,42-51 and 53-63 is/are rejected.
- 7) ☒ Claim(s) 40 and 41 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-97 are pending.

Election/Restrictions

2. In response to the restriction requirement, Applicant has elected with traverse the compound of Group III, claims 1-63. The species elected is Example 53 on page 68 of the specification, which reads on claims 1-2, 4-11, 18-19, 21-22, 27-38, 40-49, 53-54, 56-63 and the structural formula (I). Claims of the other groups are withdrawn from further consideration as being drawn to the non-elected inventions. The search has been conducted to the species compound, and its generic structural formula (I), and extended to structural formulae (II) -(IV). Claims of the other groups are withdrawn from further consideration as being drawn to the non-elected inventions. Claims directed to compounds outside of the species formula (I) -(IV) are claims 12, 13, 52.

Applicant argues that these diverse groups of compounds have the same utility and therefore it is not a burden on the Examiner. On the contrary, the Markush elements in the instant claims are so diverse in scope that a common nucleus essential to that utility is lacking. For example, compounds encompassed by the instant, wherein $X=N$, $Z=O$, $n=0$, have been shown to have utility other than the instant, such as in the treatment of cardiac diseases (Kyotani, 5576324). Applicant contends that Groups X-XIII, directed to the method claims, should be examined together with the Group III compound, however, they are distinct, since the inventive compound can be used in a materially different processes as evidenced in the different independent method claims, such as in the treatment of an individual suffering from a condition mediated by the androgen receptor, or alternatively, in the treatment of cancer in a patient, and it can be used in the determination of the presence of the androgen receptor in a cell or cell extract, or in the purification of a sample containing an androgen receptor. The restriction requirement as indicated is therefore proper. The method of use claims would be rejoined upon allowance of the compound claims if there were no enablement issues.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4-11, 14-16, 18-19, 21-26, 30-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Kost (SU 548608, abstract). Pyrrolo[4,5-f]quinolines of formula I, Pyrrolo[5,4-f]quinolines of formula II, and the compound of RN 232-85-9DP, are encompassed by the instant claims.

5. Claims 1, 2, 4-11, 14-16, 18-19, 21-26, 30-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Grandberg (SU 241441, abstract). The compound of RN 23758-94-3P is encompassed by the instant claims. The aminoethyl substituent reads on the instant 'optionally substituted alkyl'.

6. Claims 1, 2, 4-11, 14-16, 18-19, 21-26, 30-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Gryaznov (abstract). The compounds of RN 232-85-9, 118644-71-6, 118644-75-0, are encompassed by the instant claims. The aminomethyl substituent reads on the instant 'optionally substituted alkyl'. The propenoic substituent reads on the instant 'optionally substituted alkenyl'.

7. Claims 1, 2, 4-8, 14-16, 18-19, 21-26, 30-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Yudin (abstract). The compound of formula VI, the compounds of RN 72793-29-4, 72393-30-7, are encompassed by the instant claims.

8. Claims 1, 2, 4-11, 14-17, 21-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Chapman (J. Chem. Soc. 17:2334-9 (1970); Chem. Abstract). The compounds of RN 29948-24-1, 29948-25-2, 29970-37-4, 29970-48-7, 29970-50-1, 29970-51-2, 233-03-4, are

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encompassed by instant claims 1, 2, 4-11, 14-16, 21-26, 30-38. Compound III (page 2336) is encompassed by instant claims 1, 2, 4-11, 14-17, 21-39.

9. Claims 1-11, 14-16, 18-19, 21-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshikawa (abstract). The compounds of RN 232-85-9, 95196-74-0, 96418-17-6, 97789-00-9 are encompassed by the instant claims.

10. Claims 1, 2, 4-11, 14-18, 20-51, 53-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Kyotani (5576324). The compounds of the Examples wherein 'bond by ----' is a double bond 'd' (columns 37-46) are encompassed by the instant claims. The aminoethyl substituent reads on the instant 'optionally substituted alkyl'. The compounds of the Examples wherein 'bond by ----' is a double bond 'd' (columns 55-74) are encompassed by the instant claims. The Y substituent reads on the instant 'optionally substituted alkyl'.

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. Claims 1-11, 14-16, 18, 19, 21-26, 30-38, 42-45, 48-51, 53-62 are rejected under 35 U.S.C. 102(a) as being anticipated by Ferlin (abstract). The compounds with RN 288570-10-5, 288570-11-6 are encompassed by the instant claims 1, 2, 4-11, 14-16, 18-19, 21-26, 30-38. The anti-neoplastic compounds of RN 232-85-9, 95196-74-0, 96418-17-6, 97789-00-9, and the composition thereof, are encompassed by the instant claims 1-11, 14-16, 18, 19, 21-26, 30-38, 42-45, 48-51, 53-62. The phenyl substituted with methansulfonamide reads on the instant 'optionally substituted aryl'.

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Allowable Subject Matter

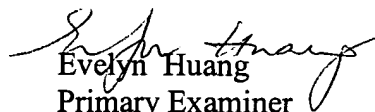
13. The compounds of Group III in Claims 40-41, and the composition thereof, are allowable. These claims are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The instant compounds having a 3-2,2,2-trifluoroethyl and a 9-trifluoromethyl are not taught or suggested by the above references. Motivation to modify the prior art compound to arrive at the instant is lacking.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 703-305-7247. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on 703-308-4698. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.


Evelyn Huang
Primary Examiner
Art Unit 1625

June 12, 2003